

Corporate Carbon Footprint Report– Eagle Wing Tours



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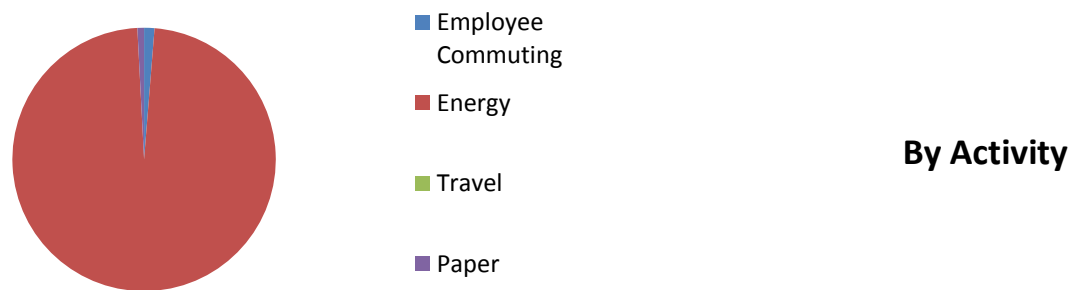
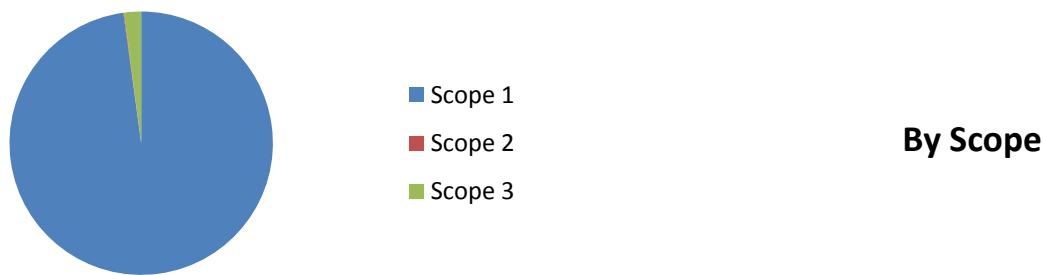
Internet: [www.dcarbon8.ca](http://www.dcarbon8.ca)

## Executive Summary

Climate change is the foremost environmental challenge facing the world today. Greenhouse gas emissions are commonly accepted as the main contributor to this problem. A Carbon Footprint is the measurement of the total greenhouse gas emissions produced to directly and indirectly support human activities, usually expressed in tonnes of carbon dioxide equivalent (CO<sub>2</sub>e). Businesses are measuring their carbon footprints to find ways to lower costs, become more environmentally friendly, and to increase their customer base by branding themselves positively to the conscious consumer.

This Carbon Footprint Report has been conducted on behalf of Eagle Wing Tours. The report was prepared using information provided by Brett Soburg of Eagle Wing Tours as guided by Steve Lessard and Karin Lengger of **Dcarbon8**, and the **DcarbonMate** data aggregating tool. This is the first year that a Carbon Footprint Report has been prepared for Eagle Wing Tours by an outside consulting company. This report follows the accounting guidelines of *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition*.

The organizational boundaries of this report include Eagle Wing Tours operations that are under their operational control for the period December 2009 through November 2010. The vast majority of emissions are a result of fuel used by Eagle Wing Tours boats with a minor amount being generated by employee commuting. Eagle Wing Tours should look to employee incentive programs to reduce commuting emissions. Emissions created by boats are not readily reducible, so the company should look to offset all of its emissions by purchasing carbon credits from a reputable source. Total emissions were 317 tonnes CO<sub>2</sub>e.



## Introduction

Climate change is the foremost environmental challenge facing the world today. It will only be tackled effectively if players at all levels in society including governments, businesses, communities and individuals take responsibility for, and attempt to minimize, their greenhouse gas emissions.

From a business viewpoint, it is about knowing where you spend your energy dollar and being aware of the savings that are possible from reductions. Creating carbon costs money, so save it. A growing number of businesses are taking steps to manage greenhouse gas emissions and reduce their impact on the climate. These businesses are enhancing their brands, motivating employees, becoming more efficient, and saving money. Customers, more than ever before, are showing loyalty to businesses that are sensitive to the environment. Many businesses are becoming carbon conscious and using that as a branding advantage.

## Accounting and Reporting Procedures

This report follows the accounting and reporting guidelines of *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition* published by the World Resources Institute and the World Business Council for Sustainable Development (the "GHG Protocol").

Data was collected from Brett Soburg of Eagle Wing Tours using the **DcarbonMate**. The footprint year used was December 2009 through November 2010.

### Boundary

#### Organizational Boundary:

Business operations vary in their legal and organizational structures. In setting organizational boundaries, a company selects an approach for consolidating GHG emissions and then consistently applies the selected approach for the purpose of accounting and reporting GHG emissions. If the reporting company wholly owns all of its operations, its organizational boundary will be the same regardless of which approach is used.

Equity Share Approach – GHG emissions are accounted for based on its share of equity in the operation.

Control Approach – GHG emissions are accounted for based on operations over which it has full control. When using the Control Approach to consolidate GHG emissions, companies shall choose between financial control or operational control criteria.

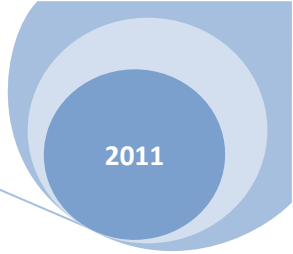
*Financial Control* – the company has financial control over the operation if the company has the ability to direct the financial and operating policies with a view to gaining economic benefits from its activities.

*Operational Control* – a company has operational control over an operation if the company has the ability to introduce and implement its operating policies at the operation. The operational control methodology was used in this report.

Operational Boundary:

Identifies and categorizes emission sources based on the organizational boundary, categorizing them as direct and indirect emissions.

- Scope 1: Direct emissions from sources that are owned or controlled by the company (ie. emissions from combustion of fuels in vehicles, furnace, etc.). Eagle Wing Tours Scope 1 emissions stem from boat and company vehicle gasoline and diesel consumption. Boat consumption data as well as company vehicle consumption was provided directly by volume used.
- Scope 2: Indirect emissions associated with the generation of purchased electricity consumed by the company. Eagle Wing Tours Scope 2 emissions stem from electricity used in their office and on their dock which was provided by the landlord for BC Hydro bills.
- Scope 3: All other indirect emissions as a consequence of the activities of the company that occur from sources neither owned or controlled by the company. (ie. paper, employee commuting, etc.) Eagle Wing Tours Scope 3 emissions stem from employee commuting, travel, paper usage and waste. Scope 3 mitigation was created by recycling and composting.

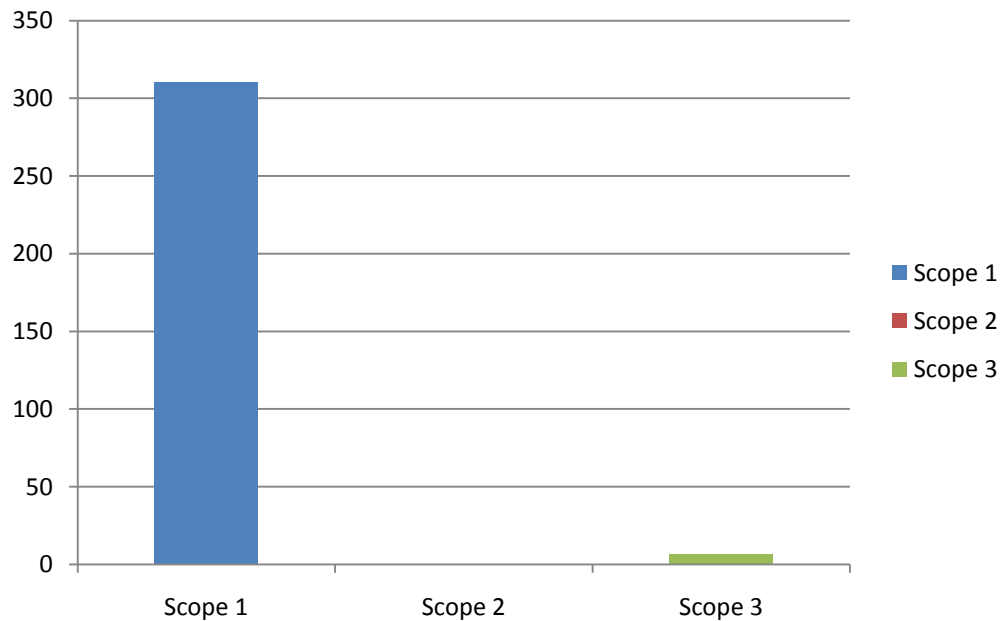


## Results

The vast majority of CO<sub>2</sub>e emissions created by Eagle Wing Tours stem from gasoline and diesel used in their boats and company vehicle, with the next most prevalent sources coming from employee commuting and paper usage.

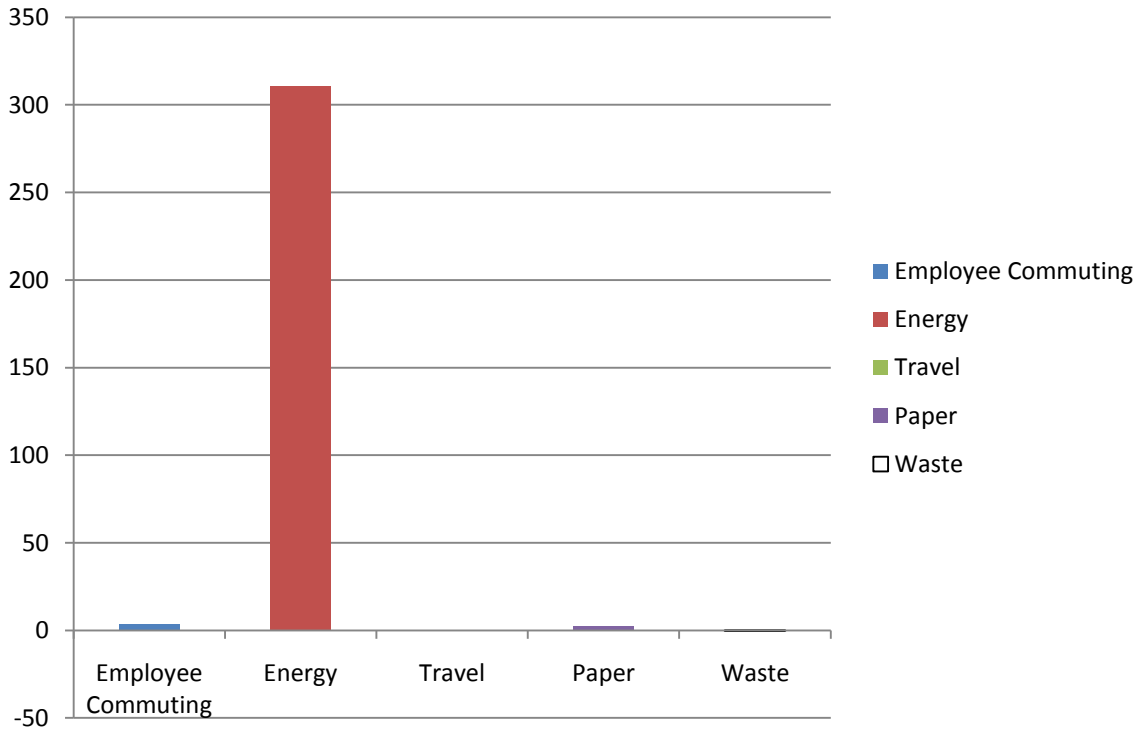
### By Scope

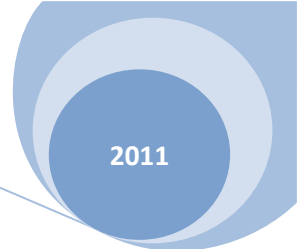
Scope 1	310,308 kg CO <sub>2</sub> e
Scope 2	260 kg CO <sub>2</sub> e
Scope 3	6,192 kg CO <sub>2</sub> e
<b>TOTAL</b>	<b>317 tonnes CO<sub>2</sub>e</b>



By Activity

Employee Commuting	Automobile	3,259 kg CO <sub>2</sub> e
	Bus	608 kg CO <sub>2</sub> e
Energy	Gasoline	205,491 kg CO <sub>2</sub> e
	Diesel	104,817 kg CO <sub>2</sub> e
	Electricity	260 kg CO <sub>2</sub> e
Travel	Ferry Travel	12 kg CO <sub>2</sub> e
Paper	Copy	59 kg CO <sub>2</sub> e
	Supercalendered	2,394 kg CO <sub>2</sub> e
Waste	Landfill Waste	11 kg CO <sub>2</sub> e
	Recycled	(24) kg CO <sub>2</sub> e
	Compost	(2) kg CO <sub>2</sub> e
<b>TOTAL</b>		<b>317 tonnes CO<sub>2</sub>e</b>





## Reduction Strategies

	Great Job!	Other Ideas
Employee Commuting	Three employees commute to work creating no carbon emissions and one employee minimized their emissions by using public transit.	Six employees commute in their cars and no one is carpooling. Eagle Wing Tours could institute an incentive program to encourage these employees to use less carbon intensive forms of transportation. Four of the six car commuting employees are within walking, cycling or busing distance.
Energy	Eagle Wing Tours uses hydro electricity to heat its offices and power its boats. This is a very low emission form of energy in British Columbia. Engines used by the company on their boats are as fuel efficient as possible.	The boats used by Eagle Wing Tours are highly energy intensive and no realistic alternative exists to reduce these emissions. Eagle Wing Tours should consider offsetting their emissions by purchasing carbon credits.
Travel	Eagle Wing Tours undertakes minimal business travel.	
Paper	Eagle Wing Tours uses very little office paper but does use a measureable amount for purposes of brochures.	When using paper, Eagle Wing Tours should choose paper with as high a recycled content as is possible and consider switching their printing to a carbon neutral printer like Hemlock Printers ( <a href="http://www.hemlock.com">http://www.hemlock.com</a> ).
Waste	Eagle Wing Tours has implemented a recycling program, recycling both paper and non-paper products. In addition, food waste is composted.	Recycling programs are working well with only 25% of Eagle Wing Tours' waste headed for the landfill. The company should investigate whether some of this landfill waste could be recycled and look for ways to reduce their consumptions thereby reducing their waste.



## The Carbon Offset Option

Carbon offsets are an innovative, market-based way for business' to take responsibility for the carbon footprint that remains after efforts have been made to reduce emissions. Carbon offsets are simply credits for reductions made at another location. As a result, they are sometimes referred to as "carbon credits". If you purchase enough offsets to balance all of your emissions remaining after reduction efforts, your net emissions will be zero. This is referred to as becoming Carbon Neutral.

The following carbon offset organizations are highly rated by the David Suzuki Foundation. To review the entire list, please visit [www.davidsuzuki.org/publications/resources/2009/purchasing-carbon-offsets/](http://www.davidsuzuki.org/publications/resources/2009/purchasing-carbon-offsets/).

Pacific Carbon Trust: **Pacific Carbon Trust** offers an important part of the solution. They are a Crown corporation of the Government of BC, created to deliver quality made-in-BC greenhouse gas offsets to help clients reduce their carbon footprint and drive the growth of BC's low-carbon economy. All projects are based in British Columbia. Carbon offsets are valued at \$25/tonne. [www.pacificcarbontrust.com](http://www.pacificcarbontrust.com).

Carbonzero: **Carbonzero** provides high quality Canadian and Internationally based carbon offsets to help neutralize and reduce unavoidable emissions. All offsets are additional, serialized, quantified, third-party verified and publicly listed on internationally recognized registries. All past and current projects are based in Canada. Carbon offsets are valued at \$25/tonne. [www.carbonzero.ca](http://www.carbonzero.ca).

Less: **Less**<sup>™</sup> aims to provide the highest quality carbon offsets available in Canada. All Less<sup>™</sup> offsets are sourced from Gold Standard-certified projects. Their flight offset program is also the only offset program certified by Environment Canada's EcoLogo program. Projects are based internationally, currently in India. Carbon offsets are valued at \$45/tonne. [www.less.ca](http://www.less.ca).

Planetair: **Planetair** is the exclusive distributor of *myclimate* in Canada. A Swiss non-profit organization, *myclimate* is one of the most respected offset suppliers in the world due to the quality of its projects. Myclimate's projects reduce greenhouse gas (GHG) emissions directly at the source. Additionally, the transparency of the project development process and the verifiable and measurable reduction of GHG emissions are myclimate's highest priorities. *Myclimate* only supports renewable energy and energy efficiency projects. All projects must produce demonstrable contributions to the sustainable development of their host communities. Projects are based internationally. Carbon offsets are valued at \$38.50/tonne. [www.planetair.ca](http://www.planetair.ca).

LivClean: **LivClean** is a Canadian organization with a global reach devoted to offering quality carbon offset products and solutions to both individuals and businesses. They have a highly experienced team who is passionate about making a difference in the environment and helping

others reduce their carbon emissions. Projects are based in Canada and internationally. Carbon offsets are valued at \$20.00/tonne. [www.livclean.ca](http://www.livclean.ca).

### **Next Steps**

- Review company policies, procedures and incentives with any eye to reduce carbon emissions wherever possible.
- Use this report as an estimate for emissions to be generated in 2011. Become Carbon Neutral for 2011 by purchasing carbon credits equivalent to emissions during 2010, complete another Carbon Footprint at the conclusion of 2011, and adjust carbon credits at that time to make up any differences.
- Join The Carbonomics Society as a Carbon Neutral company and use this recognition in all marketing initiatives.

## References

Department for Food and Rural Affairs.

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Environment Canada Climate Change Information Portal.

<http://www.ec.gc.ca/ges-ghg/default.asp?lang=En&n=EAF0E96A-1>

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Environmental Defense Fund. <http://www.edf.org/papercalculator>

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US Environmental Protection Agency. <http://www.epa.gov/nrmrl/lcaccess/lca101.html>